MONTANA CHEMICAL DEPENDENCY CENTER POLICY AND PROCEDURE MANUAL

Policy Subject: Glucagon Emergency Kit	
Policy Number: MNP 07	**Standards/Statutes: ARM 37.27.130**
Effective Date: 01/01/02	**Page 1 of 3**

PURPOSE:
For the treatment of severe hypoglycemia, in which a patient is unable to take anything orally due to disorientation or unconsciousness.

POLICY:
The MCDC medical/nursing staff has available a Glucagon Emergency Kit for the treatment of severe hypoglycemia when a patient is unable to take anything orally due to disorientation or unconsciousness.

PROCEDURE:

DEFINITION AND EXPLANATION OF GLUCAGON USE IN THE HYPOGLYCEMIC PATIENT:

Hypoglycemia is low blood glucose. Early symptoms of hypoglycemia can include:

- sweating
- dizziness
- palpitation
- tremor
- hunger
- restlessness
- light headedness
- inability to concentrate
- headache
- tingling in the hand, feet, lips, or tongue
- drowsiness
- sleep disturbances
- anxiety
- blurred vision
- slurred speech
- depressive mood
- unsteady movement
- personality changes
- abnormal behavior

If not treated, the patient may progress to severe hypoglycemia that can include disorientation,

seizures, unconsciousness, and death.

The occurrence of early symptoms calls for prompt and, if necessary repeated oral administration of some form of carbohydrate. Type I (insulin dependent) diabetics are at the greatest risk for a hypoglycemic situation. MCDC should always have readily available a quick source of sugar, such as orange juice, sweetened soda, or a candy product for diabetic patients. The prompt treatment of mild hypoglycemic symptoms with an oral form of a carbohydrate can prevent severe hypoglycemic reactions. If improvement does not occur or if administration of a carbohydrate is impossible (the unconscious patient), this is considered an emergency situation, and immediate intervention is required.

Glucagon, a naturally occurring substance produced by the pancreas, is useful in counteracting severe hypoglycemic reaction. Indications for its use are to treat insulin coma or insulin reaction resulting in severe hypoglycemia. Glucagon is helpful because it enables the patient to produce his or her own blood glucose to correct the hypoglycemic state. It must be remembered that in the unconscious patient for whom the cause of the unconsciousness is unknown, a dose of Glucagon will not harm the patient, but may save their life.

The nurse needs to immediately assess any patient experiencing any signs or symptoms of hypoglycemia. If the patient is displaying symptoms of mild hypoglycemia, the nurse should check the patient's blood sugar and administer an oral source of sugar, such as orange juice, sweetened soda, or a candy product.

If the symptoms are severe, Glucagon administration is essential. Once the decision to administer Glucagon is made, the nurse needs to act quickly. Prolong unconsciousness may be harmful. Indications for possible use of the Glucagon Emergency Kit would include:

> A known diabetic patient experiencing symptoms of severe hypoglycemia.
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> A patient that becomes extremely disoriented, is having a seizure, or becomes unconscious and the nursing staff is unaware of any cause for the patient's condition, other than a possible hypoglycemic situation.

The Glucagon Emergency Kit is located in the second floor Medication Room. The nursing staff should be familiar with its location. The contents of the kit include a 1 mg bottle containing powdered Glucagon and a syringe pre-filled with diluent. The powdered Glucagon is inactive until it is mixed with the diluent.

The nurse should delegate one staff member to call 911. The caller should remember to give clear and exact information.

Directions for administration include:

> Remove the flip-off seal from the bottle of glucagon, wipe the rubber stopper with an alcohol swab, and reconstitute the powdered Glucagon with only the diluent provided.

Glucagon should not be prepared until the nurse is ready to administer it.

Remove the needle protector from the syringe, and inject the ENTIRE contents of the syringe into the bottle of the Glucagon.

Remove the syringe. Shake the bottle gently until the glucagon dissolves and the solution becomes clear. Glucagon should not be used unless the solution is clear and of a water-like consistency.

Using the same syringe, withdraw all of the solution (1-mg mark on the syringe) from the bottle. This is a standard adult dose.

The medication can be given subcutaneous or intramuscular. Inject Glucagon immediately after mixing. Sites that can be uses include the buttocks, the deltoid, or the thigh. There is no danger of overdose.

The patient should be kept on their side to help prevent the risk of choking in case vomiting occurs.

The nurse needs to continue to monitor the patient's condition and administer basic life support as needed until the ALS TEAM arrives.

As soon as possible, the doctor on call and MCDC's Administrator should be notified of the situation.

All events concerning the situation need to be documented in the patient's chart.

Revisions:

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